

**LPDES PERMIT NO. LA0105708, AI 27417, ACTIVITY NO. PER20090001
STATEMENT OF BASIS**

**FOR THE DRAFT LOUISIANA POLLUTANT DISCHARGE ELIMINATION SYSTEM
(LPDES) PERMIT TO DISCHARGE TO WATERS OF LOUISIANA**

COMPANY/FACILITY: Bollinger Shipyards, Inc.
Bollinger Marine Fabricators, LLC
P. O. Box 1609
Amelia, Louisiana 70340

ISSUING OFFICE: Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

PREPARED BY: Elizabeth Johnson

DATE PREPARED: November 30, 2009

I. PERMIT STATUS

A. Reason For Permit Action:

Proposed reissuance of an existing Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term following regulations promulgated at LAC 33:IX.2711.

LAC 33:IX Citations: Unless otherwise stated, citations to LAC 33:IX refer to promulgated regulations listed at Louisiana Administrative Code, Title 33, Part IX revised as of June 20, 1997.

40 CFR Citations: Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations in accordance with the dates specified at LAC 33:IX.2301.F, 4901 and 4903.

- B. NPDES permit effective date:** N/A
NPDES permit expiration date: N/A
EPA has not retained enforcement authority.

- C. LPDES permit LA0105708**
LPDES permit effective date: July 1, 2005
LPDES permit expiration date: June 30, 2010

Stormwater Permit – LAR05N214
LPDES permit effective date: May 24, 2006
LPDES permit expiration date: April 30, 2011

- D. Date Application Received:** September 28, 2009
Additional Information Received: October 9, 2009

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II. FACILITY INFORMATION

A. Location:

816 Bollinger Lane, in Amelia, St. Mary Parish
Latitude: 29° 38' 54"
Longitude: 91° 6' 43"

B. Applicant Activity:

Bollinger Shipyards, Inc., Bollinger Marine Fabricators, LLC, facility (BMF), located in Amelia, in St. Mary Parish, is an existing marine vessel and barge maintenance and repair facility that has been in operation since the 1960's. BMF is currently leasing the facility from J. Ray McDermott, Inc., and continues to operate the facility as a marine vessel fabrication yard. The industrial activities conducted include cutting, welding, blasting, painting, corrosion protection application, engine maintenance and repair, structure repair and part replacement. These activities may occur within the yard or onboard vessels located in the wet dock area located along Bayou Boeuf.

According to the application, there may be wastewater discharges from customer vessels which are docked at the facility that are not generated from construction or maintenance and repair operations conducted by BMF. These wastewater discharges are generated as a result of normal operation of the vessels. Coverage under this LPDES permit does not exempt the vessel from compliance with the requirements of the EPA Vessel General Permit For Discharges Incidental to the Normal Operation of Vessels (See <http://www.epa.gov/npdes/vessels>).

C. Technology Basis:

40 CFR Chapter I, Subchapter N, Effluent Guidelines and Standards, Parts 401, 405-417 and 421-471 as adopted by reference in LAC 33:IX.4903.

Other sources of technology based limits:

General Permit Authorization for Hydrostatic Test Wastewater (LAG670000)
General Permit Authorization for Exterior Vehicle Wash Wastewater (LAG750000)

D. FEE RATE

1. Fee Rating Facility Type: minor
2. Complexity Type: I (Based upon Interim Strategy for Complexity Designations for SIC codes 3731 and 3732)
3. Wastewater Type: II
4. SIC code: 3731

III. RECEIVING WATERS:

A. Stream:

Directly to Bayou Boeuf

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B. Basin and Subsegment:

Subsegment 120403

C. Designated Uses:

The designated uses of this subsegment in the Terrebonne Basin are primary contact recreation, secondary contact recreation, propagation of fish and wildlife, drinking water supply and agriculture.

IV. **OUTFALL INFORMATION**

Outfall 001

- A. Discharge Type: facility ballast water and/or void water
- B. Location: at the point of discharge from the facility owned/leased work barges/vessels prior to combining with other waters
- C. Treatment: none
- D. Flow: intermittent
- E. Discharge Route: directly to Bayou Boeuf

Outfall 002

- A. Discharge Type: Hydrostatic test water from ballast/void tanks and/or new or previously cleaned piping, vessels and tanks.
- B. Location: at the point of discharge from the piping, vessel and/or tank being tested prior to combining with other waters
- C. Treatment: none
- D. Flow: intermittent
- E. Discharge Route: directly to Bayou Boeuf

Outfall 003

- A. Discharge Type: external equipment wash wastewater from portable washing operations used for washing equipment throughout the facility.
- B. Location: at the point of discharge from the washing activity prior to mixing with other waters
- C. Treatment: none
- D. Flow: intermittent
- E. Discharge Route: directly to Bayou Boeuf

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V. PROPOSED CHANGES FROM PREVIOUS PERMIT:

- A. Outfall 001 - a company request to change the 250 mg/L daily maximum COD limitation to a 150 mg/L daily maximum TOC limitation due to interference from high chloride concentrations was partially granted. Analytical results submitted by Bollinger suggest that 50 mg/L daily maximum TOC limitation is more appropriate. Therefore, the 250 mg/L COD limitation has been replaced with a 50 mg/L daily maximum TOC limitation.
- B. Outfall 001A - this outfall has been deleted. These discharges are now covered under the 2008 Vessel General Permit, issued by the Environmental Protection Agency, (VGP), effective on December 19, 2008. The requirements and conditions of this permit may be viewed at http://www.epa.gov/npdes/pubs/vessel_vgp_permit.pdf.
- C. Discharge Monitoring Report language listed at Part II, Paragraph V of the permit has been revised to delete the requirement to send duplicate copies of DMRs to the Southeast Regional Office.
- D. The Complexity and Wastewater Type designations have been changed to better reflect updated Departmental permitting guidance and current guidance for the ship building and repairing and boat building and repairing, pleasure craft categories as defined by the INTERIM STRATEGY FOR COMPLEXITY DESIGNATION DETERMINATIONS FOR SIC CODES 3731 AND 3732.
- E. The Monitoring Frequency for discharges through Outfall 001 were changed from once per month to once per discharge at the permittee's request and to better reflect current Departmental guidance concerning the permitting of ship building and repairing facilities.
- F. There are numerous changes to Part II. These changes are due to updates to Departmental guidance concerning the permitting of ship building and repairing facilities. These changes include additional requirements resulting in changes in numbering from the previous permit.
- G. The additional requirement of monthly average flow has been added to Outfall 002.
- H. The name of the receiving stream was changed from Intracoastal Waterway to Bayou Boeuf per a company request to maintain consistency amongst the three adjacent facilities and the subsegment stream description as listed in LAC 33:IX.1123.
- I. Permittee request to remove the pollution preventions plan requirements for external equipment washing has been denied. These requirements are consistent with current Departmental guidelines concerning permitting of ship building and repair facilities.
- J. Potable water tank and line disinfection requirements are established as a Part II condition per the permittee's request.

VI. PERMIT LIMIT RATIONALE:

The following section sets forth the principal facts and the significant factual, legal, methodological and policy questions considered in preparing the draft permit. Also, set forth are any calculations or other explanations of the derivation of specific effluent limitation and conditions, including a citation to the applicable effluent limitation guideline or performance standard provisions as required under LAC 33:IX.2707 and reasons why they are applicable or an explanation of how the alternate effluent limitations were developed.

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A. Outfall 001:

The intermittent discharge of facility ballast water and/or void water.

PARAMETER	MONTHLY AVERAGE (mg/L)	DAILY MAXIMUM (mg/L)	MONITORING FREQUENCY ¹
Flow-MGD	Report	Report	1/discharge
TOC ²	---	50	1/discharge
Oil & Grease ²	---	15	1/discharge
pH(standard units)	6.0 ³ Minimum	9.0 ³ Maximum	1/discharge
Visible Sheen	---	No Presence	1/discharge

- ¹. See Part II Paragraph N.
- ². Discharge shall be sampled whenever there is a presence of a visible sheen.
- ³. The permittee shall report on the Discharge Monitoring Reports both the minimum and maximum instantaneous pH values measured.

Site Specific Considerations for Outfall 001

Flow and pH effluent limitations and monitoring frequencies are based upon LDEQ's current guidance for permitting these types of wastewaters, LAC 33:IX.2707.1.1.b and LAC 33:IX.1113.C.1.

Oil & Grease effluent limitation and monitoring frequency are based upon LDEQ's current guidance for permitting these types of wastewaters. Sampling is only required when a visible sheen is present (See Permit Part II, Paragraph N).

Visible Sheen effluent limitation and monitoring frequency is based upon LDEQ's current guidance for permitting these types of wastewaters.

TOC 50 mg/L daily maximum effluent limitation has been established to replace the 250 mg/L daily maximum COD limitation at a monitoring frequency of 1/discharge based on best professional judgment. The once per discharge monitoring frequency is consistent with LDEQ's current guidance for permitting these types of wastewaters. Sampling is only required when a visible sheen is present (See Permit Part II, Paragraph N).

Bollinger requested to change their organic indicator parameter from COD to TOC due to analytical interference with the COD results stemming from high inorganic constituent concentrations (such as from chloride levels typically found in marine waters). According to the request, this interference results in reported COD concentrations that are not representative of the actual organic compound concentrations that the COD analysis is intended to measure.

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Bollinger's initial letter dated September 11, 2007, requested consideration for the 150 mg/L daily maximum TOC limitation based on similar discharges permitted by other Regions VI states. To support this request, Bollinger collected analytical data from June 2007 through December 2008 and presented the results in a document dated March 30 2009. This data demonstrated that there is a correlation between high chloride concentrations and high COD concentrations in the wastewater, and that TOC concentrations remain unaffected as a result of high chloride concentrations. The data also demonstrated that all TOC values were less than 50 mg/L. Therefore, LDEQ has determined that a 50 mg/L daily maximum TOC limitation is more appropriate for the discharge of maintenance and operational ballast waters from dry docks and facility owned/leased vessels and has established this limitation accordingly.

B. Outfall 002:

The intermittent discharge of hydrostatic test wastewater from ballast/void tanks and/or new or previously cleaned piping, vessels and tanks

PARAMETER ¹	MONTHLY AVERAGE (mg/L) ²	DAILY MAXIMUM (mg/L) ³	MONITORING FREQUENCY ⁴
Flow-GPD	Report	Report	1/discharge
TSS ⁶		90	1/discharge
Oil & Grease	---	15	1/discharge
TOC		50	1/discharge
Benzene	---	50 µg/L	1/discharge
BTEX ⁷ _(Total)	---	250 µg/L	1/discharge
Lead	---	50 µg/L	1/discharge
pH(standard units)	6.0 ⁸ Minimum	9.0 ⁸ Maximum	1/discharge

¹ Flow, TSS, Oil and Grease, and pH shall be measured on discharges from all new and existing pipelines, flowlines, vessels or tanks. Total Organic Carbon (TOC) shall be measured on discharges from existing pipelines, flowlines, vessels or tanks which have previously been in service – i.e., those which are not new. For Discharge Monitoring Report calculations and reporting requirements for benzene, analytical test results less than 10µg/L may be reported as zero. Benzene, Total BTEX and Lead shall be measured on discharges from pipelines, flowlines, piping, vessels or tanks which have been used for the storage or transportation of liquid or gaseous petroleum hydrocarbons. Accordingly, Flow, TSS, Oil and Grease, and pH are the only testing requirements for new pipelines, flowlines, vessels or tanks.

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- ² When discharging.
- ³ If any discharge extends beyond one week in duration, then sampling the above parameters shall continue on a weekly basis until discharge ends.
- ⁴ The month with the highest monthly average shall be reported.
- ⁵ The highest result from an individual hydrostatic test must be reported.
- ⁶ Report the TSS concentration of the intake water on the DMR along with the concentration of TSS in the effluent, if the effluent is being returned to the same water source from which the intake water was obtained. In these cases, the net value shall not exceed 90 mg/L. Concurrent sampling of the influent and effluent is required
- ⁷ BTEX is measured as the sum of benzene, toluene, ethylbenzene, ortho-xylene and para-xylene, as quantified using the methods prescribed by the latest approved 40 CFR 136, Tables A-G
- ⁸ The permittee shall report on the Discharge Monitoring Reports both the minimum and maximum instantaneous pH values measured.

Note: Additives, such as corrosive inhibitors, bactericides and dyes, may not be added to test water to be discharged without prior written approval from this Office. Written requests for approval must include toxicity data for each additive proposed for use, as well as a clear description of the proposed discharge including projected volumes of wastewaters and additive levels in the wastewaters.

Site Specific Considerations for Outfall 002

Flow is established in accordance with LAC 33:IX.2707.I.1.b. Flow shall be monitored at a frequency of once per discharge event and reported on the DMR as an estimate.

Benzene, Total BTEX, Lead, Oil & Grease, TOC and TSS limitations and monitoring requirements are established in accordance with LPDES General Permit for Hydrostatic Test and Vessel Testing Wastewater, LAG670000. These parameters shall be monitored at a frequency of once per discharge event and collected as a grab sample. These limitations and monitoring requirements have been retained from the current LPDES permit, effective on July 1, 2005.

pH is established in accordance with LAC 33:IX.1113.C.1. pH shall be monitored once per discharge event and collected as a grab sample. These limitations and monitoring requirements have been retained from the current LPDES permit, effective on July 1, 2005.

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C. Outfall 003:

The discharge of external equipment wash wastewater from portable washing operations used for washing equipment throughout the facility^{1,2}

PARAMETER	MONTHLY AVERAGE (mg/L)	DAILY MAXIMUM (mg/L)	MONITORING FREQUENCY ³
Flow-MGD	Report	Report	1/3 months
TSS	---	45	1/3 months
TOC ⁵	---	50	1/3 months
COD ⁵	200	300	1/3 months
Oil & Grease	---	15	1/3 months
pH(standard units)	6.0 ⁴ Minimum	9.0 ⁴ Maximum	1/3 months
Soaps and/or Detergents ⁶	Report	---	1/3 months

¹ For portable washing operations, a representative sample of the wastewater to be discharged during each monitoring period shall be taken, provided that the same soaps and/or detergents are used throughout that monitoring period. If the soaps, detergents or other additives used are changed during a particular monitoring period an additional representative sample of that wastewater shall be taken and reported on a Discharge monitoring Report (DMR) form.

² See Part II, Paragraph Q.

³ When discharging.

⁴ The permittee shall report on the Discharge Monitoring Reports both the minimum and maximum instantaneous pH values measured.

⁵ When soaps and/or detergents are used, COD shall be monitored rather than TOC.

⁶ The quantity and types of all soaps and/or detergents used during the sampling month shall be recorded. Records of the quantity and types of soaps and/or detergents used shall be retained for three (3) years following Part III.C.3. Additionally, a material safety data sheet (MSDS) for each material used shall be retained. No DMR reporting is required.

Site Specific Considerations for Outfall 003

Flow is established in accordance with IAC 33:IX.2707.1.1.b. Flow shall be monitored at a frequency of once every three (3) months and reported on the DMR as an estimate. These requirements have been retained from the current LPDES permit, effective on July 1, 2005.

TSS, TOC, COD, Oil & Grease, Soaps and/or Detergents and pH limitations and monitoring requirements are established based on LPDES General Permit for Exterior Vehicle Wash Wastewater, LAG750000. These parameters shall be monitored at a frequency of once every three (3) months and collected as a grab sample. These requirements have been retained from the current LPDES permit, effective on July 1, 2005.

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VII. TMDL WATERBODIES

The United States Environmental Protection Agency (EPA) issued a final report for Total Maximum Daily Load (TMDL) for Dissolved Oxygen and Nutrients in five (5) 303(d) listed subsegments in Middle Terrebonne Basin, Louisiana dated March 14, 2008. Subsegment 120403, Intracoastal Waterway, listed on EPA's Final TMDL list as impaired for organic enrichment/low dissolved oxygen (DO). No wasteload allocations were assigned to this facility. Therefore, this Office has determined that it is appropriate to address the DO impairment through TOC effluent limitations of 50 mg/L monthly average for Outfall 001, Outfall 002 and Outfall 003 and COD effluent limitations of 200mg/L monthly average and 300 mg/L daily maximum for Outfall 003.

When oxygen-demanding substances are controlled and limited to ensure that the dissolved oxygen criterion is supported, nutrients are also controlled and limited. Implementing the dissolved oxygen TMDL through future wastewater discharge permits and implementing best management practices to control and reduce runoff of soil and oxygen-demanding pollutants will also control and reduce the nutrient loading.

LDEQ's position regarding water quality criteria for nutrients is that when oxygen-demanding substances are controlled and limited in order to ensure that the dissolved oxygen criterion is supported, nutrients are also controlled and limited. See *In The Matter of Sierra Club and Louisiana Environmental Network Request for Nutrient Limits*. Docket No. AHD-DR-96001. LDEQ April 29, 1996.

The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDLs and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDLs for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

VIII. COMPLIANCE HISTORY/DMR REVIEW:

A review of LDEQ records from the time period of January 1, 2007 through October 9, 2009 was conducted. No records of open enforcement actions were noted for this facility during this time frame.

One DMR excursion was noted April 28, 2009 for Outfall 003. The permittee failed to analyze for TOC during the reporting period of April 1, 2009 through June 30, 2009. This excursion was referred to the Office of Environmental Compliance, Enforcement Division as required per current Departmental guidance for permit writers.

An inspection was conducted at BMF on December 11, 2007. No areas of concern were noted.

IX. ENDANGERED SPECIES

The receiving waterbody, Subsegment 120403 of the Terrebonne Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated November 17, 2008, from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and FWS, no further informal (Section 7, Endangered Species Act) consultation is required. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

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X. HISTORIC SITES

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Office is required.

XI. TENTATIVE DETERMINATION

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in the application.

XII. PUBLIC NOTICES

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing